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ABSTRACT

Tc assist textbook adoption committees in answering the questions that arise as they consider basal reading series, this paper provides a discussion of readability. Following a brief introduction, the second section of the paper offers a background discussion of what readability really means. In addition, this section looks at three factors to consider in judging the difficulty level of a book and discusses the various ways textbook difficulty can occur. The third section of the paper discusses the usefulness of readability formulas in evaluating textbook materials, concluding that they are most successful when applied to passages that are well-organized, appropriately written, and free of unusual vocabulary and sentence constructions. The fourth section of the paper explains what to look for in determining text difficulty and how to look for it. (FL)

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CENTER FOR THE STUDY OF READING

Reading Education Report No. 66

READABILITY, AND QUESTIONS OF TEXTBOOK DIFFICULTY

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May 1986

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Abstract

This paper is concerned with the readability of textbooks and with the standards that should be applied when different series of basal readers are being considered for adoption. What readability means is discussed, and the question is raised of whether formulas can accurately assess it. If readability formulas are not reliable measures, how can textbooks be judged? The paper concludes with alternative methods that teacher committees can use to assess potential textbooks in the process of selecting the appropriate series for students.

Readability, and Questions of Textbook Difficulty

I. Introduction

In this paper, we discuss how to approach one important set of questions which textbook adoption committees have to consider. These questions include:

(1) How difficult are the textbooks to read?

(2) Are the texts at the right level of difficulty for the students who will read them?

(3) In relation to the teaching goals for which the textbooks will be used, does the level of difficulty in the books in a series increase in the right way from one grade level to another?

The purpose of this pamphlet is to provide a discussion of what is often called readability, which is familiar to educators mainly in terms of readability formulas. We will first give some background discussion of what is really meant by readability and the appropriate level of the difficulty in textbooks. These are questions which teachers need to have answered when they want to know if they should use a given textbook for the students in their class or school. Then we will look in more detail at readability formulas, to see how close they come to being the measures of readability that we want.

Researchers have found that there are many aspects of readability which the formulas overlook or distort. Further, through the extensive use of readability formulas in publishing, some unintended bad effects have been found in the quality of the writing now common in school textbooks. If readability formulas

are not the reliable and useful measures that we want, what else is there? The last part of the pamphlet will suggest some alternative ways that teacher committees can use to judge whether a particular textbook series is going to be suitable for their students. Because readability formulas are so widely used now in textbook evaluation, publishers continue to publish books which fit them. The goal of this pamphlet is to provide teachers with the perspective and confidence to go beyond formulas in judging the readability of textbooks.

II. What Do We Mean by Readability?

When teachers ask about readability, they don't just want to know if the 'national average' student can read a book, or even if it is likely or probable that a large number of 'typical' students with their wide variations in performance can read and understand it. What they really want to know is if their students can read the book and learn from it.

The goal of judging text difficulty is usually seen as one of making sure that the material, particularly the way it is written, is not too hard for the students. But it is also important that the material not be too easy. A text that is too difficult wastes the efforts of the students without giving them any information or arousing their interest. The same is true of a textbook which is too easy, offering no incentive to learn something new and depriving the subject matter of interest. Furthermore, a textbook which is too easy or too difficult cannot offer its student readers enough opportunity to learn vocabulary and complex constructions or more about the conventions of

written language. All these must be learned before a student becomes a competent and skilled reader.

The judgment of whether a textbook is at the right level of readability is not a simple one. There are three factors to be considered:

(1) The purpose of the book in the classroom--to improve reading skill, to provide information, or to be read for pleasure;

(2) The range of background knowledge and the reading ability of the students who will be reading the book;

(3) The characteristics of the book itself--its format, the length of its selections and lessons, and finally the clarity and complexity of the ideas, and the language in which they are expressed.

In this section we will discuss in more detail what we mean by these three factors. We will show that the overall difficulty of a text is judged on more than one dimension. But first, what do we mean by textbook difficulty? Textbook difficulty can vary in many ways:

1. A book or a passage in a book might be difficult to read and understand because its content is difficult. It may express unfamiliar ideas, very abstract relations among things, or it may relate facts in very complex ways.

2. It may be difficult because the way it is organized is unfamiliar to the students, outside their normal experience in speaking or reading. This difficulty might actually be related to the content--for instance, a science or mathematics book may

be organized in very self-contained units, each of which must be understood and mastered before the reader goes on to the next. This kind of organization is very structured and incremental. So it is different from the usual time sequence organization in stories, which may be varied with flashbacks or previews.

3. A textbook may be difficult to read because the language is complex--the words are unfamiliar to many of the students or the sentences are complex. They might be composed of many subparts or clauses, which the reader must relate in the right way to each other. Or else the sentence structures may be ones used for expressing particular rhetorical meanings--emphasis, focus or contrast, for example.

Usually people worry that a textbook will be too hard because there are too many unfamiliar words and too many long sentences. But there are other less obvious kinds of difficulty. After all, a textbook can be difficult to read because its content is unclear, its internal organization is unrelated to the nature and organization of the content, and the writing style is monotonous and too simple-minded. (This kind of difficulty may be more widespread than we would like to think.)

How are these features related to our three factors?

Purpose for Reading

The "right" level of difficulty depends on how the teacher plans for the text to be used and on what the teacher hopes that the students will learn from it. In the ideal case--what teachers have as a goal even if it can't always be realized in an imperfect world--is for the textbook to be most challenging on

the dimensions they want to teach. By challenging, we mean within reach of most or all of the students, but requiring some effort and learning to achieve. On other dimensions, it could be well within the current ability of the students, so that their attention and energies can be focused on what information the teacher wants to teach with that textbook. For example, if the main purpose is practice in the mechanics of reading, then the content should be of the kind which is easily relatable to students' experience and knowledge, and the organization of the text should be clear and familiar. A passage whose meaning is easy for the students to grasp (perhaps because it is very interesting, because it is one with which the students can identify, or because it is not complex) can give the students clues for decoding difficult words, for relating their meaning to the context, and for finding and correcting misreadings. Similarly, textbooks with complex and unfamiliar content should not be so complex in other dimensions that they make the reader constantly lose the thread of the argument or exposition.

The purpose of reading is not inflexible nor is it something that is permanently attached to the text. If a textbook is too hard or too easy for one purpose, it might be a good text with a different purpose in reading. For example, a story which is too difficult for students to read for the first time on their own might be read with close guidance from the teacher to the whole class--and vice-versa. So there's some possibility for 'fine-tuning' difficulty through varying the purpose for reading. This is something which is up to the individual teacher or school,

based on their experience with textbooks and students at a particular grade level, and it means that a textbook can be effectively used even if it is not perfect for the students.

The Background Knowledge and Reading Ability of the Students

Research has shown that if students have relevant background knowledge for a selection, they have a big advantage in understanding through reading. Comprehension of meaning involves, in part, being able to relate the content being read to what the reader already knows, through experience or previous reading. For example, students in an agricultural area far from the sea might not have trouble understanding material about tornadoes or drought or conservation of soil, while they would have more trouble with reading about hurricanes, sailing ships and battles at sea. Again, there is some latitude in how the teacher presents a textbook passage. The students can be prepared for reading a passage with unfamiliar content or vocabulary if the teacher presents an introduction which gives some new information to help in understanding the unfamiliar content, and, in addition, explains some of the key new words. Or the teacher might precede the passage with another reading passage which gives the most important background information and new words.

The students' achievement in reading so far is, of course, not something that can be varied so easily. But text difficulty is not a completely fixed quantity in and of itself, nor is the level of students' reading abilities, the complex combination of knowledge and different skills which the students can use in

reading. So the decision about what textbooks are at the right level of difficulty is one which depends not just on the textbook and its inherent features, but also on the particular levels of achievement of the students.

If the teachers know that their students are strong in some areas and not so strong in others, or that there is a particular group of students who need help in some set of skills, their choice of the most useful and suitable textbook should be based on these considerations. This is one area where priorities should be discussed. The evaluation should reflect the special needs and goals which the textbook will serve in a particular school or school system. We are not trying to say that "everything is relative." What we are trying to emphasize is that there are no absolutes, and that in defining difficulty, a lot of variation will be found in who can understand a given text in a particular reading situation.

The Characteristics of the Textbook Itself

These include content, organization and complexity of the language, which were discussed in the introduction to this section. We have seen that the organization and language of a textbook may relate to its content, and its difficulty is not absolute--it depends on the purposes for reading and on the knowledge and ability of the students who are reading it. There is also some relation between the content of a passage and the choices of language it is written in. In fact, with good writing there should be a close fit between the message and all of the various means the author uses to convey the meaning. Within

certain limits it is possible to express meaning in simpler language--making a passage less complex. Some examples of simplifying words and shortening sentences are given here to illustrate how this is usually done and what the results are for the match between content and the language used to convey it.

The following excerpt of just over 100 words comes out at approximately the seventh or eighth grade level on the Fry readability formula:

> (1) Because the moon has no atmosphere to either carry sound waves or to scatter light waves, (2) its sky is never bright as Earth's is. Instead the moon's sky is always black and filled with stars. But often there is something other than stars in the moon's sky. There is the awesome and beautiful sight of our world, Earth, (2) hanging in the blackness like a huge blue and white marble, (2) bright with reflected sunlight.
>
> The bright light that (2) glows from a full moon in our sky is also reflected sunlight. Bright though (3) it seems, the moon, like all planets, has no light of its own.
>
> (T. McGowen, Album of Astronomy, 1981, p. 22)

If we were to simplify the sentences, so that each individual sentence is shorter and less complex, we would reduce the readability level to third grade on the Fry scale. This is done by deleting the underlined words, to give the following revision:

(2) The moon has no atmosphere to either carry sound waves or to scatter light waves. Its sky is never as bright as Earth's sky is. Instead the moon's sky is always black and filled with stars. But often there is something other than stars in the moon's sky. There is the awesome and beautiful sight of our world, Earth. It hangs in the blackness like a huge blue and white marble. It is bright with reflected sunlight.

Bright light glows from a full moon in our sky. This light is also reflected sunlight. The moon seems bright. But, like all planets, it has no light of its own.

But this revision has a cost in clearness.(1) Deleting because allows the sentence to be shorter, but the meaning of because is also lost. Its presence emphasizes that there is a causal relation between the absence of atmosphere and the lack of brightness in the sky on the moon.(2) Separating the relative clause from the bright light means that the reader has to do some extra work of interpretation to relate the bright light to it, finding the antecedent for the pronoun.(3) The removal of though and the regularization of the inverted sentence structure means that the contrast between two ideas is lessened and made less specific. The conjunction but in the revision indicates contrast with some idea that went before. The reader has to do some extra inference work to decide which sentence, in this case 'the moon seems bright.' The very factors which contribute to syntactic complexity, especially as measured by readability formulas, also

contribute to making clear the relations of causality, relatedness and contrast.

The difficulty of a passage as measured by formulas can also be reduced by changing hard words to simpler or more familiar ones. Consider this 100 word excerpt from a book which is very popular with children (parts of which are often included in basal readers):

(3) "One moment," said the man. "Do you mind telling me how you propose to beat the other boat?"

"I intend to crack on more sail," said Stuart.

"Not in my boat, thank you," replied the man quickly. "I don't want you capsizing in a squall."

"Well then," said Stuart, "I'll catch the sloop broad on and rake her with fire from my forward gun."

"Foul means!" said the man. "I want this to be a boat race, not a naval engagement."

"Well then," said Stuart cheerfully, "I'll sail the Wasp straight and true, and let the Lillian B. Womrath go yawing all over the pond."

"Bravo!" cried the man....

(E.B. White, 1945, Stuart Little, p. 34)

The revision replaces the nautical language and other harder words with more familiar equivalents.

Formulas which measure word complexity through syllable length or letter length would not be sensitive to the special vocabulary in the original version. Both the original and

revision come out as fourth grade on the Fry scale. A formula which has a word-list of familiar words, like the Spache formula, would assign the original a level of 3.5 and the revised version a level of 2.5.

(4) "One minute," said the man. "Do you mind telling me <u>how</u> you plan to beat the other boat?"

"I'm going to put up more sails," said Stuart.

"Not on <u>my</u> boat, thank you," replied the man quickly. "I don't want you to turn over in a storm."

"Well then," said Stuart, "I'll go straight along side the other boat and fire the front gun at her."

"Against the rules!" said the man. "I want this to be a boat race, not a sea battle."

"Well then," said Stuart cheerfully, "I'll sail the Wasp straight and true, and let the Lillian B. Womrath go sailing off course all over the pond."

"Good!" said the man ...

This revision does preserve a lot of the <u>literal</u> meaning of the original. What is missing are some of the literary values of the original. Using different words disrupts the rhythm of the sentences, so that they sound less like the natural speech of two people in a tense situation which E. B. White has captured in the original. The two selections can be compared by reading them aloud. The special nautical language is also gone, and with it goes some information about the hero and about the incident being described. Part of its appeal is that it is a gentle parody of the nautical style, which children may recognize from movies,

television and comics. It also conveys that Stuart Little, though he is small and lives in a big city, is willing to try to handle all sorts of unusual situations. Here he wants to use the words that a sailor would. This feature of his character is borne out in other chapters which describe his other adventures.

If the goal is for understanding the surface or literal meaning of a passage, then this revision might be adequate. But the reasons for reading fiction for full comprehension include learning to infer information about the characters from details which also have a purely descriptive function. They also include learning to be sensitive to different styles of speech in fictional characters or different methods of describing situations. The fact that children like this author so much demonstrates that they can understand these values.

What we have tried to show in this last section is that, unlike the first two categories, the language and organization of a text passage are not as variable as we might think. Language can be simplified, in the ways that give lower readability levels, but only at some cost. In some cases the cost is just that the text-excerpt loses its effectiveness on one or more dimensions. In other cases, simplification actually interferes with comprehension. Information that would be used to relate sentences is lost in the process, and often the revised version can seem very disconnected and monotonous.

III. How Useful are Formulas in Evaluating Textbook Material?

Readability formulas have been in use for a number of years. They are widely used by publishers in deciding what to include in

basal and content area books. They are also often used by teachers and school committees to judge the difficulty of textbooks. They have been used so much for two reasons. For many years they were thought to be the only reliable and feasible way to judge textbook difficulty. Second, they are used because they do provide an approximate measure of difficulty which predicts the level of comprehension, averaging over a large population of students and a large range of texts. The prediction is based on the correlation of complexity of ideas and the complexity of the language used to express the ideas. As we saw in the previous section, good writing involves a match between the meaning being conveyed and the way it is conveyed. This match is not inflexible and absolute, of course. Some very complex ideas may be expressed in simple everyday language, which is usually considered an instance of good writing. Conversely very simple ideas may be expressed in very complex language, which is considered pompous and silly.

(5) "We advise you to consider the purchase of various commercial devices suitable for the control and eradication of the rodent population" - "You should buy a mouse trap."

In general, the complexity of the ideas being conveyed is what directs the choice of language. Changing the external features of complexity--that is, sentence length and word difficulty--will not necessarily simplify the ideas expressed. Simplifications may remove several dimensions from the text and if the ideas are

abstract or complex or closely related, simplification will just lower the power of the text passage to communicate meaning.

Readability formulas will provide approximate measures of the difficulty of textbooks provided that the passages in them are well-written to begin with and well organized. While formulas work in many cases, they probably will not be accurate for passages which are unusual in any way either good or bad.

Having the 'right' readability level, according to one or more readability formula, does not mean that a passage in a textbook can actually be understood. Take the following example. It can be read from the point of view both of an adult and also a child in the fourth grade:

(6) Precipitation and moving air. The air around the earth is always moving. Tiny drops of water move with the air. Warm air holds many small drops of water. Cool air cannot hold much water. Moving air causes warm deserts to form. You find these deserts where warm air dries out the land. You also find deserts where cool air brings less than 10 inches (25 centimeters) of a rain fall a year to the region.

Does this paragraph make any sense? The part of the textbook that this excerpt comes from has a readability level of fourth grade. Yet, it is very unlikely that a fourth grade student would get much information from this paragraph.

The problem is not that the words are too hard and the sentences too long. It's difficult to imagine how the words and sentences could be made simpler. But if a reader tries to make

an outline of the paragraph, it becomes clear that the real problem is its organization. The individual sentences don't seem to be well connected to one another; in fact they seem contradictory. The point of the paragraph is also obscure, because the relation of the first part to the last is not made clear, unless the reader is exceptionally good at making inferences. In fact, it's nearly impossible to determine the meaning of this passage without making an outline or diagram of the content. From such an outline, it is possible to see the real flaw in the presentation. The effects--that deserts are created by the absence of enough moisture, are stated before the causes are fully explained. It is hard to see the connections between causes and effects in this passage.

The ideas which the author was trying to convey are fairly complex. It is possible to express particular content in various harder or easier ways, but there is a point below which the language can't be simplified without distortion. And the more simplified the language must be, the more crucial it becomes for minimum communication to pay attention to the logical ordering of ideas and to the coherence of the sentences with each other. Readability formulas are unable to detect genuine barriers to comprehension which are caused by poor organization or lack of coherence caused by oversimplification.

We might look at some other cases, where readability formulas are likely to give too <u>high</u> a number. The following excerpt comes from the end of a chapter in a book which is very popular with children, especially with ten or twelve year olds.

(7) She put her hands under the leaves and began to pull and push and pull them aside. Thick as the ivy hung, it nearly all was a loose and swinging curtain, as though some had crept over wood and iron. Mary's heart began to thump and her hands to shake a little in her delight and excitement. The robin kept singing and twittering away and tilting his head on one side, as if he were as excited as she was. What was this under her hands which was square and made of iron and which her fingers found a hole in?

(The Secret Garden, F. H. Burnett, Chapter 8)

The average readability level for this excerpt and the surrounding context is eighth grade. The factors which would contribute to this high a level are easy to see--there are long sentences, such as the second and fourth ones. There are unfamiliar words--crept, thump, twittering. There are even rather unusual sentence structures, as in the second sentence.

But the writing style of this passage, and the book in general, is varied and interesting. Note that in this paragraph, the sentences have distinctively different structures, and are of different lengths. Descriptions with longer and more complex sentence structures are followed by short sentences focusing attention on a single important fact--for example a sentence like: "She was standing inside the secret garden," which concludes the chapter. The readers are able to identify and sympathize with the characters in the novel, children their own age, and to share their curiosity and excitement, as well as

their discouragement and frustration. Because of this, the 'hard' language is not an obstacle to reading. Yet, if this book were not known to be so popular with children, it would probably have been ignored and forgotten because the objective measures would say that it is too hard.

The readability level of either of these two passages would be exactly the same if the order of the sentences were completely scrambled. So the use of formulas is dependent on a well-written, well-organized textbook before any rating is done. Books with made-up words, such as the very popular Dr. Seuss books, would be rated as very hard simply because the words are unfamiliar. In some cases they are strange and long with fanciful structures. Simple stories with unusual sentence structure like The House That Jack Built or The Old Lady Who Swallowed a Fly would be assigned unreasonably high readability levels because the sentences are long. They are actually not hard to understand because the structure is repetitive and easily grasped from being gradually built up from simple parts to more and more complex ones.

Formulas are most successful when applied to passages which are well organized, appropriately written and free of unusual vocabulary and sentence constructions. But they may give us false confidence in the comprehensibility of badly written and badly organized material. And they may lead us to exclude passages or books which are written with originality and imagination, just the kind of reading material which is good for

teaching children to exercise comprehension skills with rewarding results.

The wide use of readability formulas, and the general reluctance of people to trust in subjective judgment based on experience, have had an unfortunate effect which certainly nobody in publishing or teaching intended. Readability formulas have come more and more to define a model of what readable writing ought to be, even though the originators of the formulas have always warned against 'writing to formula.' Ideas get no simpler by shortening sentences. The tendency, however, is for textbook passages to contain short sentences and simple words.

This textbook writing, which also tends to have monotonous sentence structures and a kind of lead-footed disconnected quality, is what serves as a model to children of what writing is. This is especially the case for children who have little experience with books outside the classroom. A research study compared two groups of students, one group which had a basal reader with short monotonous sentences and another group which read a basal reader with longer and more varied sentences. The writing produced by each group of students accurately reflected the kind of prose which they read in their textbooks. Because of this, it is doubly important to choose reading selections for their positive qualities as interesting and appropriate writing, not just because the readability level seems to come out right.

This is not easy to do. Unfortunately, there are no easy and obvious alternatives to formulas which people are willing to use. It is well-known, however, that people with experience in

reading and in teaching children can become quite reliable judges of difficulty. Teachers who are interested in literature or particular subject matter may be more sensitive than the average person to what makes good textbook writing for a particular grade level. Children's librarians are also skilled in this.

It is very important for teachers to begin to look at the textbook writing themselves, rather than leaving the decisions solely to the publishers. Publishers base a lot of their choices on readability formulas because they believe, with some reason, that their customers want readability levels and only readability levels. The publishers will stop relying so heavily on formulas, and producing writing which sticks so closely to formulas, only if the people in teaching who make decisions about textbooks really look at other features of textbook writing. They must make judgments about quality and let publishers know that they want to choose writing of high quality. This means that people must trust in the fact that high quality writing is readable, which it is if chosen for specific purposes and student groups, and taught in an appropriate way.

IV. What to Look for and How to Look for It

Even with readability formulas, finding the actual level of difficulty of a textbook or passage is not an exact science. People are extremely varied; they have different interests, motivations, and abilities. Text passages also are non-uniform. It is normal for a book, story, or expository passage to have parts which are relatively complex and parts which are simple. In stories, for example, the sections with dialogue may have

shorter sentences and more familiar words, while descriptive and background sections may have more difficult language. For this reason it is unrealistic to expect that a third grade basal reader will have in it only selections at a third grade level, and that every part of these selections is also at third grade level. To expect this is to invite the kind of poor writing and distorting simplifications which we have given examples of. Unfortunately publishers know that many textbook selection committees make heavy use of formulas.

What one should expect from a textbook is that the reading selections in it are within the abilities of students at a particular level of achievement, or at least within reach of most of the students in the class without enormous effort. One might also reasonably expect that in a basal series there is a progression of difficulty from one grade level to another. But this does not necessarily mean that the selections within a grade level have to be finely graded for difficulty from the beginning to the end in a way that shows up as a readability level with the right decimal points. A progression from 4.1 in October of the fourth grade to 4.8 in April is not something that can be guaranteed, because of the immense variation in children and in textbook selections. Students do not all find the same passages difficult or easy.

Difficulty can be a function of many factors. Students may read a short difficult passage, exerting all their efforts, and then go on to a long and not so difficult selection which allows them lots of independent practice in some features of

comprehension which they have been introduced to already. Or students may read a selection with particularly difficult features, first with a lot of direction and preparation from the teacher, and later read a similar passage with less help. In the second case, reading a passage with the same difficulty level as the first involves a more difficult task, one which naturally belongs later in a grade level. Or else the selections within a grade level may be longer as the year progresses, even if they do not necessarily involve longer average sentence length or harder vocabulary. Because learning to read involves learning new vocabulary and a variety of sentence constructions, we can expect that some increases in sentence and word complexity will also appear from grade to grade.

What to Look for--A Summary

1. Some specific evidence that the children in a particular grade level can handle the textbook selections and that they will get the training which they need from the book.

2. Some evidence that a series progresses over grade levels in many dimensions of difficulty, not just in sentence length and word difficulty.

3. Evidence that the textbook selections are written appropriately and are clearly organized. The decision may be made in conjunction with evaluating literary quality and effectiveness of content area textbooks.

How to Look for These Properties

Just as defining textbook difficulty is not an exact science, neither is evaluating textbooks for difficulty. We have

provided some suggestions below, which require some time and attention. They all involve direct first-hand experience with the textbook material, either by teachers and other people with experience with children and reading, or the students themselves. Since these procedures involve such close examination of the textbook material, we suggest it not be done until no more than four series are being considered. First there should be an initial screening based on the most important goals. A subjective impression of the difficulty and quality of the textbook selections may be all that is possible in this initial screening. When three or four textbook series have been selected, the procedures below may be applied.

Before beginning, two or three priorities for the school should be established. What goal does the school most want to reach, and what group of students needs the most help?

A sampling procedure. This procedure is useful for comparing different grade levels within a series, or for comparing the different series in one grade level. The questions we might ask here are:

(a) Is there a useful progression of difficulty between grades and over two or more grade levels?

(b) Is one series for very advanced students--which might be the majority of the school population, or does one series have in mind the slower or less able students, which also might make up a sizeable part of the student population.

To do this sampling, access to a copying machine or several extra copies of the teachers' version of the textbook are needed (extra copies may be requested from the publisher if several extra sets have not been provided). A percentage of the total lesson selections, such as 15 or 25%, should be copied or cut out. This could be a random sample, to allow for the fact that passages within a grade level may vary a lot in difficulty, but they should not all be from the same part of the textbook. The samples should be put into loose-leaf notebooks, so that each notebook contains selections from one grade level in a series, in the order in which they appear in the book, and the notebooks for the series and the grade level should be labelled.

These samples give a condensed overview or 'snapshot' of the content of the entire textbook and of the basal series as a whole. By taking a sample, rather than reading all of the books in each series, the task is reduced to a manageable size. It still will take some time and effort, however. The size of the sample will mean that members of the committee, or outside 'experts' can take the time to read the selections carefully, along with the instructions to the teacher for directing the students through the lesson.

The samples should be read carefully and critically for two things: the quality of the writing and of the organization. How well would the students in the school handle the reading selections?

Features of writing which are hard to see in isolation often become easier to see compared with something similar. Different

grade levels in the same series can be compared to see how they differ as can selections for the same grade in different series, to see if they seem different in factors contributing to difficulty or ease in comprehension. These include content, organization, length, amount of help required from the teacher, as well as sentence and word complexity.

Librarians. Librarians in schools and at local public libraries have experience in matching books with children of different ages and reading abilities. They might be called upon to help the textbook selection committee in judging the appropriateness or difficulty of the reading selections in basal reader series considered. Librarians who specialize in children's books at a public library or school librarians who have a good up-to-date selection of children's books available in their library could be approached when the possible choices have been narrowed to three to five or fewer. The librarians may want to see the whole basal reader too, to get an idea of the range of selections and the way they are presented. So, if possible, these should be available at some point.

Librarians have day-to-day experience with children's books, both fiction and non-fiction. They know which books are the most popular--which books are read by many children and which authors are requested over and over again. From this experience they have a good idea of what makes these particular books attractive to children and also within their range. The really critical feature of this experience is that it is based on books which, in general, are not specially edited to conform to readability

formulas. There is much greater variety both of theme and style in so-called 'trade-books' as compared with the selections in basal readers. Of course, some popular tradebooks are excerpted and adapted for inclusion in basal readers. The point is that librarians' experience is not limited by the constraints which have operated on basal reader selections. Further, they know what kinds of dull writing and uninteresting themes are not appealing to children.

Questions to Ask

1. The librarians can be asked to rank the selections in the sample from each series for difficulty and increase in complexity, and that ordering compared with the order in the reader. The match does not need to be exact, but if there are big differences, the librarian might be asked to spell out why a selection has been ranked as easier or more difficult than the publisher thought it was.

2. The librarian can be asked to comment on the placement of the selections in a particular grade level given the general population at the school. This question has two facets: (a) Are the selections for a particular grade going to be within the range of students in that grade, depending on the general range of good and poor readers? Is the language challenging enough to give good and average readers practice in learning to handle more features of prose than they already know? (b) Are the selections interesting in content and style, given the age level they are supposed to be for? This question might be asked also in conjunction with evaluating for literary quality. To answer this

question, librarians might consider the age of the characters and the kinds of situations they are involved in, and the kind of language--puns and jokes, unusual words, realistic dialogue, etc.--which may appeal to children at some age levels and not to older or younger children.

2.5 Teachers. Teachers who are experienced in teaching a particular grade level often have a very good sense of what material can be read by students at that level. This sense, based on experience with children reading particular material, is more flexible than the measure given by formulas. A knowledgeable person can be sensitive to special features of the story or content which might allow readers to cope with slightly more difficulty or less unusual vocabulary or writing style. These teachers may be familiar with selections in basal readers which they have used for reading aloud to their classes.

3) Read aloud. Average or middle-range students can be asked to read aloud sample selections being considered and the teacher can listen for errors, applying the standards normally used in the classroom. Words they stumble over or pronounce incorrectly should be noted and patterns looked for. A few random errors are to be expected but when a student begins making an unusually large number, it is likely that the text is too hard. Even if the words are familiar, when the text as a whole is difficult, the reader will show the overload on his/her ability to comprehend by making word errors.

Another approach is to choose three or four students, and individually have them read sample passages aloud. While they do

this, they can be asked to comment on what kinds of difficulty they may be having--describing what isn't clear at a particular point or what they wish the author had told them. They might also comment on their overall interest of the material, or how well it gets across the content.

4. Learner verification statements. The publisher of the text being considered should be asked for learner verification statements. Each publisher tries out some of the material in the textbooks published. This testing may be very limited and informal, or it may be more extensive and carefully controlled to rule out things not in the textbook which might affect learning. A well-done learner verification study should show positive evidence that that text and the program in it works well for the typical range of children at particular grade levels. Since readability levels are important only because we want to know if the children who will use the text can read it (and therefore learn from it), it makes sense to go directly to evidence that the textbook or series is effective.